REMARKS

The Amendments shown below and these Remarks are made in reply to the Office Action mailed October 16, 2007. Claims 2-6, 8-11 and 13-23 were examined. Applicant has herein amended claim 14. Applicant respectfully requests reconsideration of claims 2-6, 8-11 and 13-23 in view of these Remarks.

I. **SUMMARY OF THE EXAMINER'S ACTIONS**

A. The Examiner rejected claims 2-6, 13 and 21-23 as obvious under 35 U.S.C. §103(a) based on U.S. Patent No. 5,960,213 ("*Wilson*") in view of U.S. Patent No. 5,793,996 ("*Childers*"), and further in view of U.S. Patent No. 6,421,053 ("*Johns*").

B. The Examiner rejected claims 8 - 11 and 14 - 20 as obvious under 35 USC §103(a) based on *Wilson*, *Childers* and *Johns* and further in view of U.S. Patent No. 5,594,854 ("*Baldwin*").

II. **SUMMARY OF THE AMENDMENTS**

Claim 14 has been amended to move the limitation regarding using a function intended for a different purpose from the preamble to the body of the claim.

III. **ARGUMENTS**

A. The Obviousness Rejections

1. Independent Claims 14 and 21 Are Patenable

The Examiner acknowledges that neither *Wilson* nor *Childers* explicitly teaches that reordering of data is performed by using an operation intended for another function, as recited in independent claims 14 and 21. However, the Examiner alleges that *Johns* does so. (Office Action dated 10-16-2007 at p. 6). Applicant respectfully disagrees, and further, submits that the Examiner has failed to make a *prima facie* case for obviousness.

As an initial matter, applicant notes that the field of the present invention relates to reordering data to allow accurate and efficient read/write operations from sequential memory. The cited patents to *Wilson* and *Baldwin* are commonly owned by 3D Labs Inc. and describe the GLINT Delta data conversion unit, discussed in applicant's prior responses, which includes functions specifically intended for reordering data. The *Childers* patent, owned by Apple Computer, Inc.,

-7-

discusses byte swapping, and is also relevant. However, the patent to *Johns* is not concerned with reordering data for read/write operations, but instead is focused on a specific need for a data read operation, e.g. rendering data to a display. Further, *Johns* does not discuss byte swapping or any other form of reordering data. *Johns* is concerned with a different problem – improving rendering efficiency. Thus, applicant submits that *Johns* is not properly combined with other cited references in this case. In addition, the Examiner fails to provide detailed reasoning as required by the *Graham* case and the recent *KSR* case. It is unclear from the Examiner's conclusory statements how *Johns* would be combined with *Wilson* and *Childers* to arrive at applicant's claims. Thus, applicant submits that the Examiner has not established a *prima facie* case for obviousness.

Notwithstanding the improper combination, applicant submits that *Johns* fails to provide the missing feature, namely, reordering data using a function not provided for that purpose. The Examiner alleges that "*Johns* teaches rendering operation is able to reorder data in span so span can be rendered in a zig-zag manner" (*Id.*) As far as applicant understands the basis for rejection, it appears that the Examiner is suggesting that the "zig-zag" manner of block rendering described in *Johns* is a "reordering" of data. However, applicant disagrees that rendering data in a zig-zag manner as taught in *Johns* is a reordering of data a recited in applicant's claims.

Johns is not concerned with reordering of data. In fact, **applicant submits that *Johns* does not reorder data at all, but merely renders the data as it is stored** using a unique serpentine method. That is, the data is properly displayed, in its proper order – only the method for rendering the data to the display has changed. According to the method disclosed by *Johns*, raster engine 202 receives primitives for rendering, and breaks the primitives into groups of scan lines (also referred to as "spans"). (*See Johns* at Col. 2:43-47). The groups of scan lines are transferred to blocking control logic 204, which converts the scan lines into blocks of pixels and stores them in cache 208. At this point, the data is stored, but certainly not "reordered" in any sense of that term. The blocks of pixels are then rendered, although not in a conventional scan line manner, but in the unique serpentine block manner taught in *Johns*. Thus, the data has not been reordered before rendering.

Again, as understood by the applicant, the Examiner is apparently alleging that the rendering of pixel blocks in a zig-zag manner as taught by *Johns* is a reordering of the data. However, applicant submits that such rendering is not a reordering of data at all, but rather, just a method for rendering that does not follow the conventional scan line method.

-8-

Claims 14 and 21 both require transforming original coordinates to new coordinates using an operation of the secondary processor not provided for that function. The cited combination does not teach or suggest this limitation, and the claims are therefore considered patentable.

2.   Independent Claim 22 Is Patentable

Independent claim 22 is similar in form to independent claims 14 and 21, but recites more specifically that a draw operation is used to transform coordinates. The Examiner makes the conclusory allegation that "*Johns* teaches this, as discussed for claim 21" (Office Action at p. 8), but as discussed above, *Johns* does not reorder data at all. Therefore, claim 22 is also considered patentable.

3.   Dependent Claims 2 - 6, 8 - 11 and 13 Are Patentable

Claims 2-6, 8 – 11 and 13 all depend from claim 21, and applicant submits these claims are allowable since the corresponding independent claim is allowable.

4.   Dependent Claims 15 – 20 Are Patentable

Claims 15 – 20 all depend from claim 14, and applicant submits these claims are allowable since the corresponding independent claim is allowable.

5.   Dependent Claim 23 Is Patentable

Claim 23 depends from claim 22, and applicant submits this claims are allowable since the corresponding independent claim is allowable.

B.   Conclusion

Based on the above amendments and these remarks, reconsideration of the claims as now pending is respectfully requested.

The Examiner's prompt attention to this matter is greatly appreciated. Should further questions remain, the Examiner is invited to contact the undersigned attorney by telephone.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 501826 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: __January 16, 2008__

By:__ /Richard A. Nebb/ _____
       Richard A. Nebb
       Reg. No. 33,540
       rnebb@vierramagen.com

VIERRA MAGEN MARCUS & DENIRO LLP
575 Market Street, Suite 2500
San Francisco, CA 94105-2871
Telephone: (415) 369-9660
Facsimile: (415) 369-9665

MS305827.01